| In | dex | of | Cla | aims |
|----|-----|----|-----|------|



Application/Control No.

10/830,090

Date

Examiner

Arleen M. Vazquez

Applicant(s)/Patent under Reexamination

KOYAMA ET AL.

Art Unit

2829

| 7 | Rejected |
|---|----------|
| = | Allowed  |

- (Through numeral)
Cancelled

Restricted

Claim

Non-Elected

I Interference

A Appeal
O Objected

|             |                            |              |              |  | -  |              |              | ı  |          | _  |
|-------------|----------------------------|--------------|--------------|--|--|--------------|--------------|--|----------|--|
| Cla         | im                         | Date         |              |  |  |              | $\neg$       |  |          |  |
|             |                            | $\vdash$     |              |  | ΓĪ   |              |              |  |          |  |
| _           | Original                   | 6            |              |  |  |              |              |  | ļ        |  |
| Final       | iĝi                        | 8/17/07      |              |  |  |              |              |  |          |  |
| ш.          | ō                          | 8            |              |  |  |              |              |  |          |  |
|             |                            | -            |              |  | _  |              | _            | _  |          | $\dashv$   |
|             | 1                          | 44           |              |  |  |              |              |  |          | _  |
|             | 2                          | 1            | _            |  |  |              |              |  | ١.       |  |
|             | 1<br>2<br>3<br>4<br>5<br>6 | Ż            |              |  |  |              |              |  |          |  |
|             | 4                          | 7            |              |  |  |              |              |  |          |  |
|             | 5                          | Z            |              |  |  |              |              |  |          | П  |
|             | 6                          | Ν            |              | $\vdash$   |  |              |              |  |          |  |
|             | 7                          |              | _            | $\vdash$   |  |              |              |  |          |  |
|             | 8                          | <b>∠</b> Z   | _            | H  |  |              | $\vdash$     |  | $\dashv$ | $\vdash$   |
|             | 9                          | Ì            | -            | -  | $\vdash$   | Η-           | $\vdash$     |  | -        |  |
|             | 10                         | 7            | $\vdash$     | $\vdash$   | _  |              | $\vdash$     |  | -        | $\dashv$   |
| <u> </u>    | 10                         |              | ├-           | -  |  | -            | Н            |  |          |  |
|             | 11                         | 2            | <del> </del> | -  | $\vdash$   | $\vdash$     | -            | $\vdash$   | $\vdash$ | $\vdash$   |
|             | 12                         | Ν            | <u> </u>     | $\vdash$   | $\vdash$   | $\vdash$     | Ш            | _  |          |  |
|             | 13<br>14                   | N            | <u> </u>     | <u> </u>   | <u> </u>   | $\vdash$     | Ш            | Щ  | Щ        |  |
| L           | 14                         | N            |              | Щ.   | <u> </u>   |              |              |  |          | Щ  |
| <u> </u>    | 15                         | N            | L            | _  | _  |              |              |  |          |  |
|             | 16                         | N            | L            | L  | L  |              |              |  |          |  |
|             | 16<br>17                   | N            |              |  |  |              |              |  |          |  |
|             | 18                         | N            |              |  | Г  |              |              |  |          |  |
|             | 19<br>20                   | N            |              | <u> </u>   |  | -            |              |  |          |  |
|             | 20                         | 1            | $\vdash$     |  | Г  |              |              |  |          |  |
|             | 21                         | $\vdash$     |              | H  | H  | Н            | _            | _  |          |  |
| ├──         | 22                         | -            | -            |  | $\vdash$   |              | $\vdash$     |  | $\vdash$ | Н  |
| <u> </u>    | 22                         | ┢            | -            | ┢  | -  | _            |              |  |          |  |
|             | 24                         |              |              | ⊢  | ┢  | $\vdash$     | -            |  | -        | Н  |
| <del></del> | 25                         |              |              | ⊢  | ⊢  | ⊢            |              | _  |          | $\vdash$   |
| ├           | 26                         | ┢            | ┢            | ⊢  | -  |              | -            |  |          | $\vdash$   |
| <u> </u>    | 27                         | -            | -            | <del> </del>                                     | -  | -            | $\vdash$     | _  | $\vdash$ | H  |
| -           | 27                         | ┝            | ⊢            | ├  |  | -            | <b>!</b>     | _  | Н        | H  |
|             | 28                         | <u> </u>     | <u> </u>     | <del> </del>                                     | <u> </u>   | ├            | L            | _  | Н        | ⊢  |
|             | 29                         | <b> </b>     |              | <u> </u>   | _  | _            | _            | _  | _        | _  |
|             | 30                         | L            |              | <u> </u>   |  |              | _            |  |          |  |
|             | 31                         | $oxed{oxed}$ |              | 乚  | _  |              |              | $ldsymbol{ldsymbol{ldsymbol{eta}}}$              | Ш        | $oxed{oxed}$                                     |
| L           | 32                         |              |              |  | $\Box$   | L            | $oxed{oxed}$ |  |          | $oxed{oxed}$                                     |
|             | 33                         | L            |              | Ĺ  | L  | L            |              |  |          | L  |
|             | 34                         |              |              |  |  |              |              |  |          |  |
|             | 35                         |              |              |  |  |              |              |  |          |  |
|             | 36                         | Г            |              | 1  | <del>                                     </del> | 1            | П            |  | П        |  |
|             | 36<br>37                   | T            | Г            | $\vdash$   | $\vdash$   | Т            | <u> </u>     | <b></b>  |          |  |
|             | 38                         | T            | $\vdash$     | $\vdash$   | Н  | $\vdash$     |              | $\vdash$   | $\vdash$ | $\vdash$   |
| $\vdash$    | 39                         | $\vdash$     | $\vdash$     | $\vdash$   | $\vdash$   | <del> </del> | 1            | $\vdash$   | $\vdash$ |  |
| <del></del> | 40                         | $\vdash$     | $\vdash$     | t  | $\vdash$   | $\vdash$     | $\vdash$     | <del>                                     </del> | -        | $\vdash$   |
| <del></del> | 41                         | -            | ╁            | $\vdash$   | $\vdash$   | $\vdash$     | $\vdash$     | $\vdash$   | $\vdash$ | $\vdash$   |
| $\vdash$    | 42                         | -            | ├            | <del>                                     </del> | ├  | ╁            | $\vdash$     | ⊢  | $\vdash$ | $\vdash$   |
|             | 42                         | ₩            | H            | $\vdash$   | $\vdash$   | ₩            |              | ├-   | -        | -  |
| $\vdash$    |                            | 1            | $\vdash$     |  | ├  | $\vdash$     | -            | $\vdash$   | $\vdash$ | <del>.                                    </del> |
|             | 44                         | -            | -            | -  | -  | -            | <b>—</b>     | <u> </u>   | _        | <u> </u>   |
|             | 45                         |              |              |  |  |              | $\vdash$     | -  | _        |  |
| <u> </u>    | 46                         | _            | $\vdash$     | <b>L</b>   | <b>—</b>   | <u> </u>     | <u> </u>     | _  | <u> </u> | <b>—</b>   |
| <u> </u>    | 47                         | <b>Ļ</b>     | <u> </u>     | <u> </u>   | Ц_   | <u> </u>     | <u> </u>     | Ŀ  |          | <u> </u>   |
|             | 48                         | oxdot        | <b>_</b>     | <u> </u>   | <u> </u>   | <u> </u>     | $\vdash$     | <u> </u>   | _        | <u> </u>   |
|             | 49                         | 1_           | _            | _  | _  | L            | lacksquare   | _  | <u></u>  | _  |
| 1           | 50                         | 1            | 1            | 1  |  | ł            | 1            |  | t        | 1  |

| <u> </u>     | 0.0      |          | _  | _            | ī  |          | ,<br>    |              | _        | _             |
|--------------|----------|----------|--|--------------|--|----------|----------|--------------|----------|---------------|
| Final        | Original |          |  |              |  |          |          |              |          |               |
|              | 51       |          |  |              |  |          |          |              |          | П             |
|              | 52       | Н        |  |              | Н  | Н        |          |              |          | $\neg$        |
| _            | 53       |          |  |              |  |          |          |              |          | $\overline{}$ |
| -            | 54       | Н        |  | _            |  | -        | $\vdash$ | -            | -        | $\neg$        |
| -            | 55       | $\vdash$ |  | _            | -  | _        |          | -            |          | -             |
| <del> </del> | 56       | Н        | _  | $\vdash$     | $\vdash$   | $\vdash$ | _        | -            |          |               |
| ⊢            | 56<br>57 | $\vdash$ |  |              |  |          | _        |              |          | -             |
| <u> </u>     | 58       | $\vdash$ | _  | _            | _  | $\vdash$ | _        | Н            |          | Н             |
| $\vdash$     | 50       | -        |  |              |  |          | _        | Н            |          |               |
| <u> </u>     | 59       |          | _  |              |  | $\vdash$ | _        |              |          |               |
| <u> </u>     | 60       | Щ        |  | <u> </u>     |  |          |          |              |          |               |
| <u> </u>     | 61       | Щ        |  |              |  | _        |          |              |          |               |
| <u> </u>     | 62<br>63 | Щ        |  | _            |  | L        |          |              |          |               |
|              | 63       | Ш        |  | Щ            | <u> </u>   | Щ        |          |              |          |               |
|              | 64       |          | _  | L            |  |          | _        |              |          |               |
|              | 65       |          |  | L.           |  |          |          |              |          |               |
|              | 66       |          |  | L            |  |          |          |              |          |               |
|              | 67       |          |  |              |  |          |          |              |          |               |
|              | 68       |          |  |              |  |          |          |              |          |               |
|              | 69       |          |  |              |  |          |          |              |          |               |
|              | 70       |          |  |              |  |          |          |              | -        |               |
| $\vdash$     | 71       | Т        | _  | _            |  | _        |          |              |          |               |
| -            | 72       |          |  | $\vdash$     | $\vdash$   |          | $\vdash$ | _            |          |               |
| -            | 73       | _        | _  | _            | _  |          | Н        | Н            |          | $\vdash$      |
|              | 73<br>74 | $\vdash$ | _  | -            | -  |          | -        | $\vdash$     |          | _             |
| -            | 75       | $\vdash$ | _  | $\vdash$     | $\vdash$   | ┢        | ⊢        | ⊢            | _        |               |
| $\vdash$     | 76       | ┢        | _  |              |  | ⊢        | ⊢        | ⊢            | _        | <u> </u>      |
| -            | 76<br>77 | -        | -  | $\vdash$     | ⊢  | $\vdash$ | ⊢        | ⊢            | ⊢        | $\vdash$      |
| -            | 77       |          |  | $\vdash$     | ┢  | ⊢        | ⊢        | <del> </del> |          |               |
| -            | 78       | -        | -  | -            | -  | H        | ⊢        | H            | <u> </u> | -             |
| -            | 79       |          | _  | <u> </u>     | <u> </u>   | <u> </u> | <u> </u> | -            |          | -             |
| -            | 80       |          |  | <u> </u>     | <u> </u>   | <u> </u> | <u> </u> | <u> </u>     | <u> </u> | _             |
| $\vdash$     | 81       | _        | _  | <u> </u>     | <u> </u>   | <u> </u> | _        | <u> </u>     | _        | _             |
| <u> </u>     | 82<br>83 | ᆫ        |  | ┖            | ╙  | ┕        | <u> </u> | <u> </u>     | L        | L             |
|              | 83       | 乚        | _  | 乚            | _  |          | <u> </u> | <u> </u>     | L        | L_            |
| <u> </u>     | 84       | oxdot    | <u> </u>   | $oxed{oxed}$ | <u> </u>   | _        |          | _            | <u> </u> | L             |
| oxdot        | 85       | _        | <u>_</u>   | <u>_</u>     | 乚  | _        | 匚        | <u></u>      | <u> </u> | <u></u>       |
|              | 86       | L        | L  | L            |  | _        |          |              | L        | $oxed{oxed}$  |
|              | 87       |          |  |              |  |          |          | <u> </u>     |          |               |
|              | 87<br>88 |          |  | 匚            |  |          |          | Ĺ            |          |               |
|              | 89       |          |  |              |  |          |          |              |          |               |
|              | 90       |          |  |              |  | Г        |          |              |          | П             |
|              | 91       |          |  |              | П  |          |          |              |          |               |
|              | 92       |          | Г  | П            |  |          |          | Г            | Г        |               |
|              | 93       |          | Г  | 1            | 1  |          | Г        |              | Г        |               |
|              | 94       |          |  | T            |  |          |          |              | $\vdash$ |               |
|              | 95       |          |  |              |  |          |          | -            |          |               |
|              | 96       | т        | <del>                                     </del> | 1            | 1  | 1        | 1        | $\vdash$     |          |               |
| $\vdash$     | 97       | $\vdash$ | <del>                                     </del> | ١            | <del>                                     </del> | $\vdash$ | $\vdash$ | ┢            | Н        | 怈             |
| -            | 98       | t        | $\vdash$   | t            | $t^-$  | $\vdash$ | $\vdash$ | $\vdash$     | $\vdash$ | $\vdash$      |
|              | 99       | ┰        | ┢  | $t^{-}$      | $\vdash$   | $\vdash$ | $\vdash$ | $\vdash$     | $\vdash$ | $\vdash$      |
|              | 100      | $\vdash$ | $\vdash$   | $t^-$        |  | $\vdash$ | $\vdash$ | 1            | $\vdash$ | $\vdash$      |
|              |          |          |  |              |  |          |          |              |          |               |

| Cla       | Date                            |  |                                     |              |              |                |   |                                     |                                     |           |
|-----------|---------------------------------|--|-------------------------------------|--------------|--------------|----------------|---|-------------------------------------|-------------------------------------|-----------|
|           |                                 |  |                                     |              | ٦            |                |   |                                     |                                     | $\dashv$  |
| ਯ         | Original                        |  |                                     |              | Ì            |                |   |                                     | . ]                                 | ļ         |
| Final     | rigi                            |  |                                     |              |              |                |   |                                     |                                     | ı         |
| _         | 0                               |  |                                     |              |              |                |   |                                     |                                     |           |
|           | 101                             |  |                                     | $\neg$       |              |                | $\vdash$  |                                     | $\dashv$                            | ㅓ         |
|           | 101<br>102                      |  |                                     |              | $\neg$       | Н              | $\neg$  |                                     | $\dashv$                            | ᅥ         |
|           | 103                             |  |                                     |              |              |                |   |                                     | $\neg$                              | ㅓ         |
|           | 104                             |  |                                     |              |              |                |   |                                     | $\dashv$                            | ᅥ         |
|           | 104<br>105                      | $\vdash$   | -                                   |              | _            |                |   |                                     | $\dashv$                            | $\dashv$  |
|           | 106                             |  |                                     | $\vdash$     | $\neg$       |                | $\equiv$  |                                     |                                     | $\neg$    |
|           | 107                             | -  |                                     | $\neg$       |              |                |   |                                     |                                     | $\dashv$  |
|           | 108                             |  |                                     |              |              |                |   |                                     |                                     | П         |
|           | 109                             |  |                                     |              |              |                |   |                                     |                                     | $\neg$    |
|           | 110                             |  |                                     |              |              |                |   |                                     |                                     | $\neg$    |
|           | 111                             |  |                                     |              |              |                |   |                                     |                                     |           |
|           | 112                             |  |                                     |              |              |                |   |                                     |                                     |           |
|           | 113                             |  |                                     |              |              |                |   |                                     |                                     |           |
|           | 112<br>113<br>114               |  |                                     |              |              |                |   |                                     |                                     |           |
|           | 115                             |  |                                     |              |              |                |   |                                     |                                     |           |
|           | 116                             |  |                                     |              |              |                |   |                                     |                                     |           |
|           | 117                             |  |                                     |              |              |                |   |                                     |                                     |           |
|           | 118                             |  |                                     |              |              |                |   |                                     |                                     |           |
|           | 118<br>119                      |  |                                     |              |              |                |   |                                     |                                     |           |
|           | 120                             |  |                                     |              |              |                |   |                                     |                                     |           |
|           | 121                             |  |                                     |              |              |                |   |                                     |                                     |           |
|           | 122                             |  |                                     |              |              |                |   |                                     |                                     |           |
|           | 121<br>122<br>123<br>124<br>125 |  |                                     |              |              | Ĺ              |   |                                     |                                     |           |
|           | 124                             |  |                                     |              |              |                |   |                                     |                                     |           |
|           | 125                             |  |                                     |              |              |                |   |                                     |                                     |           |
|           | 126<br>127<br>128<br>129<br>130 |  |                                     |              |              | L              |   |                                     |                                     |           |
|           | 127                             | <u> </u>   |                                     | L            |              | L              |   |                                     |                                     |           |
|           | 128                             | $ldsymbol{ld}}}}}}$ |                                     | L            |              |                |   |                                     |                                     |           |
|           | 129                             |  |                                     | $oxed{oxed}$ | _            | _              |   |                                     |                                     |           |
|           | 130                             | _  |                                     |              |              | L              | L   | L                                   | L                                   |           |
|           | 131                             | _  | <u> </u>                            |              |              |                | $ldsymbol{ld}}}}}}$ | $oxed{oxed}$                        | $oxed{oxed}$                        | Ш         |
|           | 132<br>133                      | <u> </u>   | _                                   | $oxed{oxed}$ |              |                | <u> </u>  | L                                   | <u> </u>                            |           |
|           | 133                             | <u> </u>   | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ | <u> </u>     | L_           | L_             | <u> </u>  | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ | Ш         |
|           | 134                             | <u> </u>   | <u> </u>                            | <u> </u>     | <u> </u>     | L_             | <u> </u>  |                                     | 匚                                   | Ш         |
|           | 135<br>136                      | <u> </u>   | Ļ                                   | Щ            | <u> </u>     | _              | <u> </u>  | <u> </u>                            | <u> </u>                            | $\square$ |
|           | 136                             | <b> </b>   | L                                   | <u> </u>     | L_           | 1_             | _   | <u> </u>                            | _                                   | Щ         |
|           | 137                             | <u> </u>   | _                                   | <u> </u>     | $\vdash$     | <b> </b>       | <u> </u>  |                                     | <u> </u>                            | Н         |
|           | 138<br>139                      |  |                                     | <u> </u>     | <u> </u>     | $\vdash$       | <u> </u>  | $\vdash$                            | ⊢                                   | Ш         |
|           | 139                             | <u> </u>   | ļ                                   | <u> </u>     | <u> </u>     | ⊢              | <u> </u>  | <u> </u>                            | ⊢                                   | Щ         |
|           | 140                             | <b>—</b>   | <b>—</b>                            | <b> </b>     | <u> </u>     | <u> </u>       | <u> </u>  |                                     | 1                                   | Н         |
|           | 141                             | <u> </u>   | <u> </u>                            | <u> </u>     | ⊢            | <b>—</b>       | <u> </u>  | <u> </u>                            | <b></b>                             | $\vdash$  |
|           | 142                             | <u> </u>   | -                                   | <u> </u>     | $\vdash$     | -              | <u> </u>  | -                                   | _                                   | Н         |
|           | 143                             | <u> </u>   | $\vdash$                            | <u> </u>     | $\vdash$     | -              | ⊢   | <del> </del>                        |                                     | Н         |
|           | 144                             |  |                                     | _            | <u> </u>     | -              | _   | _                                   | _                                   | Н         |
|           | 145                             | -  | -                                   | -            | -            | -              |   |                                     |                                     | Н         |
|           | 146                             | <u> </u>   | ⊢                                   | ⊢            | <del> </del> | <u> </u>       | ₩   | $\vdash$                            | $\vdash$                            | $\vdash$  |
| <b></b> - | 147                             | ├-   |                                     | ⊢            | $\vdash$     | <del> </del> — | ├—  | ├                                   | -                                   | Н         |
| <u> </u>  | 148                             | ⊢  | $\vdash$                            | <del> </del> | ⊢            | ⊢              | ⊢   | ├                                   |                                     | -         |
| -         | 149                             | ├  | ⊢                                   | ├-           | ⊢            | -              | ⊢   | ├-                                  | $\vdash$                            | $\vdash$  |
|           | 1 150                           | <u></u>  | Ц.                                  | Щ.           | Ц.           | <u></u>        | ļ   |                                     | <u> </u>                            | نــــا    |